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(12) **United States Patent**  
**Sherwani**(10) **Patent No.:** US 7,870,496 B1  
(45) **Date of Patent:** Jan. 11, 2011(54) **SYSTEM USING TOUCHSCREEN USER INTERFACE OF A MOBILE DEVICE TO REMOTELY CONTROL A HOST COMPUTER**(76) Inventor: **Jahanzeb Ahmed Sherwani**, 509 Sierra Vista Ave., No. 6, Mountain View, CA (US) 94043

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 162 days.

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**G06F 3/00** (2006.01)(52) **U.S. Cl.** ..... **715/761**; 715/740; 715/737;  
715/718(58) **Field of Classification Search** ..... 715/761,  
715/740, 737, 718, 249; 709/223, 248; 382/306  
See application file for complete search history.(56) **References Cited**

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Various embodiments relate to a local computing device that includes a display and a touchscreen interface. The device is operable to establish a remote network computing session with a host computer system, transmit touch event information associated with touch events, receive graphical display information corresponding to a host image associated with the host computer system, translate the graphical display information from host coordinates to local coordinates, update the local image based on the graphical display information, the local image comprising a selected portion of the host image, and, in response to mouse movement events caused by associated touch events, change the selected portion of the host image while keeping a cursor in the center of the display, except when the center of the selected portion is within a predetermined limit of an edge of the host image, thereafter move the cursor relative to the local display.

**24 Claims, 18 Drawing Sheets**